

PATENT

Applicant: KENNETH A. GOLDBERG  
Serial No.: 09/902,502  
Filed: July 9, 2001  
Title: METHOD AND APPARATUS FOR INSPECTING A EUV MASK BLANK  
Group:  
Examiner:  
Docket No.: LBL-CIB-1572

**COMBINED DECLARATION AND POWER OF ATTORNEY**

(ORIGINAL, DESIGN, SUPPLEMENTAL, NATIONAL STAGE OF PCT, DIVISIONAL,  
CONTINUATION OR CONTINUATION-IN-PART)

As a below named inventor, I hereby declare that:

**TYPE OF DECLARATION**

This declaration is of the following type:

- ☒ original (regular)  
☐ design  
☐ supplemental-continuation of PCT Application in the U.S.

NOTE: If the declaration is for an International Application being filed as a divisional, continuation, or continuation-in-part, do not check the next item; check appropriate one of last three items.

- ☐ national stage of PCT  
☐ divisional  
☐ continuation  
☐ continuation-in-part

**INVENTORSHIP IDENTIFICATION**

**WARNING:** If the inventors are each not the inventors of all of the claims, an explanation of the facts, including the ownership of all the claims at the time the last claimed invention was made, should be submitted.

My residence, post office address, and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention described in

**SPECIFICATION IDENTIFICATION**

- ☐ the specification filed herewith by the above-named inventors, with the title listed above.
- ☐ the specification filed herewith by the above-named inventors, with the title listed above, and which was amended by the Preliminary Amendment filed herewith.
- ☐ the specification identified above, as amended by the Preliminary Amendment filed herewith.
- ☒ the specification identified above, and which was amended on N/A.
- ☐ PCT International Application No. \_\_\_\_\_ filed on \_\_\_\_\_, and amended under PCT Article 19 on \_\_\_\_\_ (if applicable).

**ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR**

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

**PRIORITY CLAIM (35 U.S.C. § 119(a)-(d))**

I hereby claim foreign priority benefits under 35 U.S.C. §§ 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or under 35 U.S.C. § 365(b) of any PCT international application(s) designating at least one country other than the United States of America listed below, and have also identified below any foreign application(s) or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

- ☒ no such applications have been filed.
- ☐ such application have been filed as follows.

**PRIOR FOREIGN/PCT APPLICATION(S) FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS APPLICATION AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. § 119(a)-(d)**

COUNTRY (OR INDICATE IF PCT)	APPLICATION NUMBER	FILING DATE (day, month, year)	PRIORITY CLAIMED UNDER 37 U.S.C. § 119	
			<input type="checkbox"/> YES	<input type="checkbox"/> NO
			<input type="checkbox"/> YES	<input type="checkbox"/> NO
			<input type="checkbox"/> YES	<input type="checkbox"/> NO
			<input type="checkbox"/> YES	<input type="checkbox"/> NO

**CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S)  
(35 U.S.C. § 119(e))**

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional applications (s) listed below.

PROVISIONAL APPLICATION SERIAL NUMBER      FILING DATE OF PROVISIONAL APPLICATION


**CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATIONS  
UNDER 35 U.S.C. 120**

(complete this part only if this is a divisional, continuation, CIP or national stage of PCT)

I/We hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability under 37 C.F.R. § 1.56, which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

**PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS  
DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. 120:**

**1. U.S. Applications:**

SERIAL NUMBER	FILING DATE

**2. PCT Applications Designating The U.S.**

PCT APPLICATION NUMBER	PCT FILING DATE	U.S. SERIAL NUMBER

**POWER OF ATTORNEY**

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith.

John P. O'Banion  
James M. Ritchey  
Steven L. Smith  
Rodger H. Rast

Registration No. 33,201  
Registration No. 32,594  
Registration No. 44,343  
Registration No. 45,853

Attached as part of this declaration and power of attorney is the authorization of the above-named attorney to accept and follow instructions from my representative(s).

**SEND CORRESPONDENCE TO:**

John P. O'Banion  
O'BANION & RITCHEY LLP  
400 Capitol Mall, Suite 1550  
Sacramento, CA 95814

**DIRECT TELEPHONE CALLS TO:**

John P. O'Banion  
(916) 498-1010

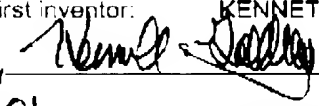
**DECLARATION**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**SIGNATURE(S)**

Full name of sole or first inventor:

KENNETH A. GOLDBERG

Inventor's Signature: 

Date: 9/28/01

Country of Citizenship: UNITED STATES

Residence:

BERKELEY, CALIFORNIA

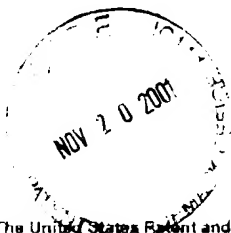
P.O. Address:

1174 ARCH STREET  
BERKELEY, CA 94708

CHECK PROPER BOX(ES) FOR ANY OF THE FOLLOWING ADDED PAGE(S) WHICH FORM A PART  
OF THIS DECLARATION

- ☐ Signature for third and subsequent joint inventors.  
Number of pages added \_\_\_\_\_.
- ☐ Signature by administrator(trix), executor(trix) or legal representative for deceased or  
incapacitated inventor.  
Number of pages added \_\_\_\_\_.
- ☐ Signature for inventor who refuses to sign or cannot be reached by person authorized  
under 37 CFR 1.47.  
Number of pages added \_\_\_\_\_.
- ☐ Signature by one joint inventor on behalf of deceased inventor(s) where legal  
representative cannot be appointed in time under 37 CFR 1.47.  
Number of pages added \_\_\_\_\_.
- ☐ Authorization of attorney(s) to accept and follow instructions from representative.

☒ This Declaration ends with this page.



The United States Patent and Trademark Office mail room stamp hereon acknowledges receipt of the following items:

For: METHOD AND APPARATUS FOR INSPECTING AN EUV MASK BLANK  
In the names of KENNETH A. GOLDBERG  
Serial No. 09/902,602

1. Submission of Missing Parts of Application (Page 1 thru 3);
2. Notice to File Missing Parts of Application Filing Date Granted (Page 1 & 2);
3. Combined Declaration and Power of Attorney (Page 1 thru 5);
4. Power of Attorney by Assignee and Exclusion of Inventors Under 37 C.F.R. 3.71 (Page 1);
5. Assignee Certification Under 37 C.F.R. 3.73(b) (Page 1);
6. Check in the amount of \$1,548 (\$1,418 filing fees and \$130 surcharge for the fees due as a large entity);
7. Assignment (Document) Cover Letter (Page 1 thru 3);
8. Assignment (Page 1 & 2) and;
9. Check in the amount of \$40 assignment recording fee.

Date Mailed: 11/22/01  
Attorney: John P. O'Banion  
Docket No.: LBL-CIB-1572

THE UNITED STATES PATENT AND TRADEMARK OFFICE



John P. O'Banion  
O'BANION & RITCHEY LLP  
400 Capitol Mall, Suite 1550  
Sacramento, CA 95814

5399

WELLS FARGO BANK  
SACRAMENTO, CA 95814  
91-119/121

10/22/2001

\$ \*\*1,548.00

John P. O'Banion  
O'BANION & RITCHEY LLP  
400 CAPITOL MALL, SUITE 1550  
SACRAMENTO, CA 95814  
(916) 498-1010



PAY TO THE ORDER OF Commissioner of Patents and Trademarks

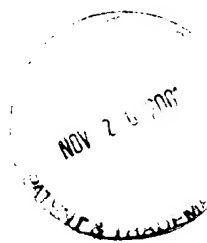
One Thousand Five Hundred Forty-Eight and 00/100 \*\*\*\*\* DOLLARS

LBL-C'B-1572

09/902,502

MEMO

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PATENT

Docket No.: LBL-CIB-1572

Applicant or Patentee: KENNETH A. GOLDBERG  
Serial or Patent No.: 09/902,502  
Filed or Issued: JULY 9, 2001  
For: METHOD AND APPARATUS INSPECTING AN EUV MASK BLANK  
Group:  
Examiner:

**POWER OF ATTORNEY BY ASSIGNEE  
AND EXCLUSION OF INVENTOR(S) UNDER 37 C.F.R. 3.71**

Dear Sir:

The undersigned assignee of the entire interest in the above-identified subject application hereby appoints

**John P. O'Banion, Reg. No. 33,201**

as its attorney to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, said appointment to be to the exclusion of the inventors and their attorney(s) in accordance with the provisions of 37 C.F.R. 3.71.

An assignment of the entire interest in the above-identified subject application:

- ☐ was recorded on \_\_\_\_\_ at reel/frame \_\_\_\_\_ / \_\_\_\_\_.
- ☒ Is submitted herewith for recording.

Please direct all telephone calls to John P. O'Banion at (916) 498-1010 and all correspondence relative to said application to the following address:

**John P. O'Banion, Esq.  
O'BANION & RITCHEY LLP  
400 Capitol Mall, Suite 1550  
Sacramento, CA 95814**

Dated: 8/14/01

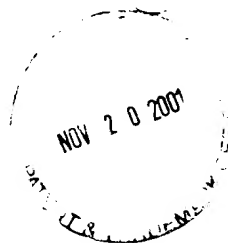
ASSIGNEE: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

Signature: *David J. Aston*

Typed Name: DAVID J. ASTON

Title: Manager, Patent Department  
Lawrence Berkeley National Laboratory  
One Cyclotron Road, M/S 90-1121  
Berkeley, California 94720





PATENT

Docket No.: LBL-CIB-1572

Applicant or Patentee: KENNETH A. GOLDBERG

Serial or Patent No.: 09/902,502

Filed or Issued: JULY 9, 2001

For: METHOD AND APPARATUS FOR INSPECTING AN EUV MASK BLANK

Group:

Examiner:

**ASSIGNEE CERTIFICATION UNDER 37 C.F.R. 3.73(b)**

In accordance with 37 C.F.R. 3.73(b), the assignee hereby certifies that the evidentiary documents with respect to its ownership have been reviewed and that, to the best of the assignee's knowledge and belief, title is in the assignee seeking to take this action


Dated: 8/14/01

ASSIGNEE: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

Signature: David J. Aston

Typed Name: David J. Aston

Title: Manager, Patent Department  
Lawrence Berkeley National Laboratory  
One Cyclotron Road, M/S 90-1121  
Berkeley, CA 94720

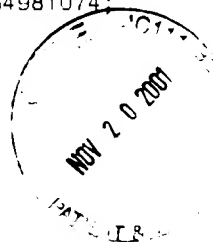
		<b>John P. O'Banion</b> <b>O'BANION &amp; RITCHEY LLP</b> 400 CAPITOL MALL, SUITE 1550 SACRAMENTO, CA 95814 (916) 498-1010	
<b>WELLS FARGO BANK</b> SACRAMENTO, CA 95814 91-1191221		<b>5400</b>	
		10/22/2001	
PAY TO THE ORDER OF		\$ **40.00	
Commissioner of Patents and Trademarks			
Forty and 00/100*****		DOLLARS 0 00	

MEMO 09/02/502 LBL-CIB-1572

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*[Signature]*

NOV 20 2001



**PATENT**

Attorney Docket No. LBL-CIB-1572

Applicant: KENNETH A. GOLDBERG  
Serial No.: 09/902,502  
Filed: JULY 9, 2001  
Title: METHOD AND APPARATUS FOR INSPECTING AN EUV MASK BLANK  
Group:  
Examiner:

**BOX ASSIGNMENT**

**Assistant Commissioner for Patents**

**Washington, D.C. 20231**

**ASSIGNMENT (DOCUMENT) COVER LETTER**

**PATENT OR PATENT APPLICATION**

**1. NAMES OF PARTY(IES) MAKING TRANSFER**

Name 1: KENNETH A. GOLDBERG

**2. IDENTITY OF PARTY(IES) TO WHOM TRANSFER IS MADE**

This transfer is being made to:

Name: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
Address: 1111 FRANKLIN STREET, 12<sup>TH</sup> FLOOR  
OAKLAND, CA 94607-5200

**3. INTENTION OF DOCUMENT**

A brief description of what the accompanying document intends to accomplish is that it is an:

- ☒ Assignment  
☐ License  
☐ Security Interest  
☐ Other

**4. IDENTIFICATION OF PATENT OR APPLICATION**

Particulars of the patent or application to which the accompanying document applies are:

Inventor(s): KENNETH A. GOLDBERG

For (title): METHOD AND APPARATUS FOR INSPECTING AN EUV MASK BLANK

(a) ☐ U.S. patent application filed herewith.

(b) ☒ U.S. patent application serial no. 09/902,502 filed on JULY 9, 2001.

(c) ☐ U.S. patent no. \_\_\_\_\_ issued \_\_\_\_\_.

**5. NAME AND ADDRESS TO WHICH CORRESPONDENCE SHOULD BE MAILED**

Please address all correspondence and return the recorded document to:

John P. O'Banion  
O'BANION & RITCHEY LLP  
400 Capitol Mall, Suite 1550  
Sacramento, CA 95814

**6. NUMBER OF APPLICATIONS OR PATENTS IDENTIFIED AND TOTAL FEE DUE**

The number of applications or patents identified herein is: 1

Total Fee Due \$ 40.00

**7. DATE DOCUMENT WAS EXECUTED**

The accompanying document was executed on: July 11, 2001.

**8. FEE PAYMENT**

Fee payment is provided for as follows:

☐ New Application transmittal (Item 18 - INCLUDED IN FILING FEE)

☐ FWC Transmittal (Item VII)

☐ Transmittal of Filing under 37 CFR 1.60(b) (Item 11)

☒ Attached is a check in the sum of \$40.00

☒ Charge Account No. 07-1137 If any additional fee is due.

       Charge Account No.        in the sum of        A duplicate of this transmittal is attached.

9. **STATEMENT OF AUTHENTICITY**

The undersigned certifies that, to the best of his or her knowledge and belief, the information contained in this cover sheet is true and correct, and any copy of the document submitted for recording is a true copy of the original document.

10. **SIGNATURE**

Dated: October 22, 2001



John P. O'Banion, Reg. No. 33,201  
O'BANION & RITCHEY LLP  
400 Capitol Mall, Suite 1550  
Sacramento, CA 95814  
(916) 498-1010

**PATENT**Attorney Docket No LBL-CIB-1572**ASSIGNMENT**

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

Name: KENNETH A. GOLDBERG  
Address: 1174 ARCH STREET  
BERKELEY, CA 94708

Nationality: UNITED STATES

hereby sell(s), assign(s) and transfer(s) to ASSIGNEE.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, A CALIFORNIA CORPORATION, 111 FRANKLIN STREET, 12<sup>th</sup> Floor, OAKLAND, CA 94607-5200.

and the successors, assigns and legal representatives of the ASSIGNEE, the entire right, title and interest for the United States and its territorial possessions and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled:

**METHOD AND APPARATUS FOR INSPECTING AN EUV MASK BLANK**

and which is found in

- (a) ☐ U.S. provisional patent application filed herewith and listing the above named person(s) as inventor(s).
- (b) ☐ U.S. patent application filed herewith listing the above named person(s) as inventor(s).
- (c) ☒ U.S. patent application serial no. 09/902,502, filed on JULY 9, 2001
- (d) ☐ U.S. Patent No.: \_\_\_\_\_, issued \_\_\_\_\_.

and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNOR(S) further covenant(s) that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and

AND the ASSIGNOR(S) request(s) the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, the Regents of the University of California.

Date:

9/28/01

Inventor:

  
KENNETH A. GOLDBERG